



Department of Defense INSTRUCTION

NUMBER 6055.14

January 23, 1998

USD(A&T)

SUBJECT: Unexploded Ordnance (UXO) Safety on Ranges

- References:
- (a) Sections 172 and 2701 of title 10, United States Code
 - (b) [DoD Directive 6055.9](#), "DoD Explosives Safety Board (DDESB) and Component Explosives Safety Responsibilities," July 29, 1996
 - (c) DoD 6055.9-STD, "DoD Ammunition and Explosives Safety Standards," August 1997, authorized by DoD Directive 6055.9, July 29, 1996
 - (d) 1982 United Nations Convention on the Law of the Sea (UNCLOS)¹
 - (e) through (h), see enclosure 1

1. PURPOSE

This Instruction:

1.1. Implements, under references (a) through (c), UXO safety policy for all active and inactive ranges used by the Department of Defense.

1.2. Prescribes, under the authority of the Department of Defense Explosives Safety Board (DDESB), the minimum explosives safety precautions required to protect DoD personnel and the public from UXO on ranges. The Military Departments, Combatant Commands, and Defense Agencies may prescribe more stringent requirements as necessary.

¹ Available in Volume 21 of International Legal Material (1982), pages 1261-1354 and Senate Treaty Document 103-39 (October 7, 1984)

2. APPLICABILITY AND SCOPE

This Instruction applies to:

2.1. The Office of the Secretary of Defense (OSD), the Military Departments, the Combatant Commands, and the Defense Agencies (hereafter referred to collectively as "the DoD Components").

2.2. All active and inactive land and water ranges under DoD control.

3. DEFINITIONS

Terms used in this Instruction are defined in enclosure 2.

4. POLICY

Consistent with peacetime and wartime operational requirements, it is DoD policy under DoD Directive 6055.9 (reference (b)) to enhance readiness by providing the maximum possible protection to operational capability, personnel, property, and the environment from the damaging effects of explosive mishaps.

5. RESPONSIBILITIES

5.1. The Under Secretary of Defense for Acquisition and Technology, working through the DDESB, shall have principal OSD staff responsibility for UXO explosives safety policy. The DDESB shall monitor compliance with this Instruction during its explosives safety surveys.

5.2. The Heads of the DoD Components shall review their existing guidance to ensure that it complies with this Instruction and shall implement the procedures in section 6., below.

5.3. The Commanders of the Combatant Commands shall, for ranges outside the United States, through respective Service components, ensure compliance with this Instruction at joint use ranges (ranges used by more than one Service or Agency) within their area of responsibility.

5.4. The Secretaries of the Military Departments shall:

5.4.1. Issue implementing instructions in conformance with this Instruction for UXO management at active and inactive ranges under their respective control.

5.4.2. Monitor compliance with implementing instructions and this Instruction through an active and aggressive UXO range safety program.

6. PROCEDURES

Ranges (land or water) are a finite resource whose continuing viability is critical to the DoD mission. This long-term viability is predicated upon various factors, including the extent and type of UXO contamination present. Range contamination to the point of saturation (or near saturation) can seriously degrade mission readiness and ultimately result in the closing of that range with attendant consequences. In view of this, the DoD Components must take steps to safeguard the long-term viability of these essential assets. UXO clearance operations by definition are hazardous; they place personnel and material at direct risk and, therefore, must be undertaken with the utmost caution, awareness of safety, and meticulous attention to detail. Given the above guidance, the DoD Components shall:

6.1. Provide the maximum practicable protection to personnel, property, and the environment from the damaging effects of accidental or deliberate explosions and, in regard to water ranges in ocean areas, conduct all activities required by this Instruction in a manner consistent with rights and obligations of the United States under international law as reflected in the provisions of UNCLOS (reference (d)).

6.2. Safely clear UXO from ranges consistent with the stated mission of the installation and for the continuing viability of the range.

6.3. Perform a thorough risk assessment in preparation for range clearance operations. At a minimum, the risk assessment must include the number of personnel involved, types of ordnance anticipated to be encountered and/or recovered, support requirements, expected levels of contamination on the range, and a clearly articulated rationale for the clearance.

6.4. Limit authorized access to ranges to the minimum number of personnel necessary to accomplish the required task. Access by others may be permitted when necessary, but extreme caution must be observed at all times.

6.5. Prohibit unauthorized access to ranges and impact areas. Post UXO hazard warning signs where possible (bilingual, as required), and require other access controls, as necessary.

6.6. Establish an outreach program to educate both installation personnel and the surrounding public on the dangers of trespassing on ranges and the hazards associated with UXO in general.

6.7. Maintain permanent records of:

6.7.1. All expenditures (types, quantities, locations, and estimated dud rates) of ammunition and explosives.

6.7.2. All mishaps attributed to UXO that occur on or off the installation in accordance with (IAW) DoD Instruction 6055.7 (reference (e)).

6.7.3. All explosive ordnance disposal (EOD) incidents or UXO clearance operations conducted on ranges.

6.7.4. All areas containing known or suspected UXO using range maps and/or installation master planning maps.

6.8. Restrict the use of improved conventional munitions to test ranges, unless necessary to support readiness.

6.9. Respond promptly to protect personnel and property from any UXO hazard located on or off a military installation IAW specific DoD Component procedures.

6.10. Notify both installation personnel and the public, as appropriate, if any range operation presents a potential explosive hazard off the range. This includes informing the public of any mishap that could affect the local community, and may require additional precautions and/or restrictions.

6.11. Respond, IAW DoD's response authorities under 10 U.S.C. 172 and 2701 (reference (a)), and 42 U.S.C. 9604 (reference (f)), to releases or substantial threats of release of hazardous UXO constituents, from an active or inactive range to an area off such range when such release or threat of release poses an imminent and substantial threat to human health or the environment.

6.12. Before leasing, selling, transferring, or changing the use of a range, conduct

clearance of UXO and other explosive ordnance or materials to the extent necessary to provide a level of protection of human health and the environment that is consistent with the reasonably anticipated future use of the property.

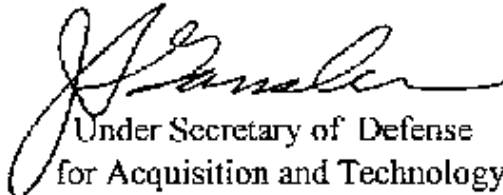
6.13. Resolve conflicts between explosive safety and other requirements, ensuring that explosives safety takes precedence.

7. INFORMATION REQUIREMENTS

Recordkeeping and mishap reporting shall be compatible with the requirements of references (c), (e), (g) and (h).

8. EFFECTIVE DATE

This Instruction is effective immediately.



Under Secretary of Defense
for Acquisition and Technology

Enclosures - 2

1. References
2. Definitions

E1. ENCLOSURE 1

REFERENCES, continued

- (e) [DoD Instruction 6055.7](#), "Mishap Investigation, Reporting and Recordkeeping," April 10, 1989
- (f) Section 9604 of title 42, United States Code
- (g) [DoD Directive 8910.1](#), "Management and Control of Information Requirements," June 11, 1993
- (h) [DoD Directive 8000.1](#) "Defense Information Management (IM) Program," October 27, 1992

E2. ENCLOSURE 2

DEFINITIONS

E2.1.1. Buffer Zone. An area on a range extending beyond an impact area to provide a safety zone to contain ricochets, blast, and fragmentation from exploding ordnance.

E2.1.2. Explosive Ordnance. All munitions containing explosives. This includes bombs and warheads, guided and ballistic missiles, artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; demolition charges; pyrotechnics; clusters and dispensers; cartridges and propellant-actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and similar or related items or components explosive in nature.

E2.1.3. Explosive Ordnance Disposal (EOD). The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded explosive ordnance. It may also include explosive ordnance that has become hazardous by damage or deterioration.

E2.1.4. Explosive Ordnance Disposal (EOD) Incident. The suspected or detected presence of UXO or damaged explosive ordnance that constitutes a hazard to operations, facilities, personnel, or materiel.

E2.1.5. Explosives Safety. A condition where operational capability and readiness, personnel, property, and the environment are protected from the unacceptable effects of an ammunition or explosives mishap.

E2.1.6. Explosives Safety Management. A process of risk management consisting of policies, procedures and engineering controls that reduces the probability and/or the consequences of an ammunition or explosives mishap.

E2.1.7. Impact Area. An area on a range within the limits of which all ordnance is intended to impact and/or detonate.

E2.1.8. Improved Conventional Munitions. Munitions containing two or more anti-armor, anti-personnel or anti-materiel submunitions, such as grenades, bomblets, or mines.

E2.1.9. Mishap. An accident or unexpected event involving DoD ammunition

and explosives.

E2.1.10. Range (Active). Designated air, land, and water areas set aside, managed, and used to research, develop, test and evaluate military munitions, other ordnance, or weapons systems, or to train personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas. This includes the airspace above the range.

E2.1.11. Range (Inactive). An area that at one time had been active and is necessary or required for training, testing and mobilization requirements but is currently not being used.

E2.1.12. Unexploded Ordnance (UXO). Explosive ordnance that has been primed, fuzed, armed, or otherwise prepared for action and that has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations, materials, or personnel and remains unexploded either by malfunction or design or for any other cause.